

**ETHIOPIA ROLL BACK MALARIA CONSULTATIVE MISSION:
ESSENTIAL ACTIONS TO SUPPORT THE ATTAINMENT OF THE
ABUJA TARGETS**

16th to 20th February 2004

**Kassahun Negash; Daddi Jima, Fatoumata Nafu-Traore; Kopano Mukelabai;
James Banda; Ambachew Medhin; Asnakew Kabebe; Charles Paluku; Monica
A Olewe; John Chimumbwa; Andrew Collins; Melanie Renshaw; Christiane
Rudert-Thorpe; Chris White and Patrick Moonasar**

1. EXECUTIVE SUMMARY

The Roll Back Malaria Board, representing the global RBM partners, requested the RBM Partnership Secretariat to conduct a series of country consultative missions to determine what additional inputs Category 1 countries would require to support the attainment of the Abuja Targets. The purpose of the country consultative missions is to re-invigorate co-operation between the RBM partnership and countries to support progress towards the Abuja Targets.

Ethiopia is making progress towards the Abuja targets in spite of the constraints imposed by the large population of Ethiopia (more than 60 million) and the low coverage and utilisation of health services. Community health workers and mother co-ordinators have helped expand treatment coverage in Tigray province and ITN coverage is increasing following the importation of more than 1 million nets by UNICEF and WHO. The epidemiology of malaria in Ethiopia precludes the use of IPT with SP as a malaria prevention tool during pregnancy.

The following key essential actions were identified during the country consultative mission:

Policy and Strategy Environment:

- Strengthen partner co-ordination mechanisms at Federal and Regional levels
- Include indicators for malaria control in the Sustainable Development and Poverty Reduction Paper (SDPRP).
- Undertake comprehensive analysis of malaria financing

Access to effective treatment

- Update, ratify and disseminate drug policy
- Hasten the registration of ACTs
- Include ACTs in 4th round GFATM proposal
- Update treatment guidelines for health workers
- Consolidate regional community based implementation plans
- Scaling up of Health Extension Package (HEP) and integration of malaria with other programmes (IMCI, Reproductive health, EPI).

Selective vector control

- Ratify ITN strategic plan following final review by MCST
- Implementation of a programme package approach to ITN delivery
- Policy brief for removal of taxes and tariffs on ITNs
- Comprehensive review of the IRS programme, including financing mechanisms
- Operational costs for IRS to be included in 4th round GFATM proposal

Malaria Epidemics Prevention and Control

- Register ACTs for use during epidemics
- Ensure ACT procurement and use is reflected in the 4th round GFATM proposal
- Develop guidelines and conduct training of health personnel on the use of ACT
- Assess the suitability of RDTs
- Ensure adequate contingency funding available at federal, regional and district levels
- Establish a customs clearance fast-track system for emergency malaria supplies
- Map malaria epidemic risk and vulnerable populations for improved targeting of resources
- Identify MEWS sentinel sites
- Draft regional preparedness and response plans and conduct micro-planning exercises

Malaria Prevention and Control in Pregnancy

- Formulate, ratify and disseminate MIP policy and strategy and guidelines
- Conduct operational research on the role of ACTs during pregnancy

Human Resources

- Fill vacant post of manager within Federal Malaria Control Unit
- Malaria profiling study to form basis for a Human Resource Development strategy for malaria

Information education and communication.

- An integrated communication strategy for malaria and IMCI should be developed in line with current best practices, including interpersonal participatory processes.

Malaria Control and Health Systems

- Ensure that emergency commodities to respond to epidemic situations are fast tracked.
- In the short term, procurement is to be contracted out and government systems strengthened.

It should be emphasised that the gaps, resource requirements and essential actions identified are additional and complementary to those currently planned and budgeted for within existing resources in the country, including Global Fund monies.

2. TABLE OF CONTENTS

1. EXECUTIVE SUMMARY	2
2. TABLE OF CONTENTS	4
3. ABBREVIATIONS.....	5
4. INTRODUCTION.....	6
5. METHODOLOGY	6
6. SUMMARY SITUATION ANALYSIS	7
6.1. Malaria transmission and burden	7
6.2. Policy and Strategy Environment and Partnerships	8
6.3. Access to effective treatment	12
6.4. Selective vector control.....	13
6.5. Malaria Epidemics Prevention and Control	14
6.6. Malaria Prevention and Control in Pregnancy	15
6.7. Supportive Strategies	15
6.8. Malaria Control and Health Systems	17
7. ABUJA TARGETS – WILL THEY BE MET?	18
7.1. ITN coverage among under-fives and pregnant women	19
7.2. IPT coverage among pregnant women.....	20
7.3. Access to effective treatment for under-fives	20
7.4. Summary	20
8. THE ESSENTIAL ACTIONS	21
8.1. Strategy Policy and Partnership	21
8.2. Access to effective treatment	22
8.3. Selective vector control.....	22
8.4. Malaria Epidemics Prevention and Control	23
8.5. Malaria Prevention and Control in Pregnancy	24
8.6. Human Resources.....	24
8.7. Information education and communication.....	25
8.8. Operational Research	25
8.9. Malaria Control and Health Systems	25
9. PROPOSED COUNTRY SUPPORT PACKAGE: ESSENTIAL ACTIONS AND INVESTMENTS REQUIRED - ETHIOPIA	27
10. FOLLOW UP ACTIONS.....	33
11. ANNEX 1: List of persons and organisations consulted.....	34
11.1 Participants at Consensus Meeting 20 February 2004	34
11.2 Participants Tuesday 16 February 2004 meeting	35
12. ANNEX 2: Reaping Meeting Programme 16-20 February 2004.....	37
12.1 Annex 2b: Agenda Pre-Reaping meeting, Nazareth	38
13. ANNEX 3: Documents reviewed during country consultative mission	39

3. ABBREVIATIONS

ACT	Artemisinin-based Combination Therapy
ANC	Antenatal Clinics
CCM	Country Co-ordinating Mechanism
CQ	Chloroquine
DDT	dichlorodiphenyltrichloroethane
ENHRI	Ethiopia Nutrition and Health Research Institute
EPI	Extended programme of Immunisation
EARN	Eastern Africa RBM Network
ESARO	Eastern and Southern Africa Regional Office
FMOH	Federal Ministry of Health
GFATM	Global Fund to Fight Aids TB and Malaria
GOE	Government of Ethiopia
HEAs	Health Extension Agents
HEP	Health Extension Package
HPN	Health Partnership Network
CHW	Community Health Workers
IEC	Information Education and Communication
IMCI	Integrated Management of Childhood Illnesses
IPT	Intermittent Preventive Treatment
IRS	Indoor Residual Spraying
ITNs	Insecticide Treated Nets
KAP	Knowledge Attitude and Practices
LLINs	Long Lasting Insecticidal Nets
MCHP	Mother Co-ordinators and Health Promoters
MCST	Malaria Control Support Team
MIP	Malaria in Pregnancy
MOH	Ministry of Health
NHSP	National Health Strategic Plan
PASS	Pharmaceutical Administration and Supply Service
PSI	Private Sector Initiatives
REAPING	Roll Back Malaria :Essential Actions, Products, Investments, Gaps
RBM	Roll Back Malaria
RHB	Regional Health Bureau
SDPRP	Sustainable Development and Poverty Reduction Programme
SNNPR	Southern Nation Nationalities People Region
SP	Sulphadoxine Pyrimethamine
SWAp	Sector Wide Approach
TA	Technical Assistance
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WARN	West African RBM Network
WHO	World Health Organisation
WHOPES	WHO Pesticide Evaluation Scheme

4. INTRODUCTION

The Roll Back Malaria Board, representing the global RBM partners, requested the RBM Partnership Secretariat to conduct a series of country consultative missions to determine what additional inputs Category 1 countries¹ would require to support the attainment of the Abuja Targets. The RBM Partnership Secretariat requested the Eastern Africa RBM Network – which represents partners in the sub-region – to participate in these country consultative missions.

Ethiopia was one of the countries identified to be visited by the RBM board for the Reaping mission. The REAPING mission to Ethiopia was undertaken from the 16-20 February 2004.

The purpose of the country consultative mission was to:

- Re-invigorate co-operation between the RBM partnership and countries to support progress towards achieving the Abuja Targets

The expected outcomes of the missions were:

- To determine the status of RBM implementation in Ethiopia, in relation to the Abuja plan and targets and the milestones set for the remaining two years of the Abuja plan period
- To identify the essential actions (beyond those already planned) that need to be implemented during 2004 and 2005 to maximise country action to achieve the Abuja Targets
- To develop a Country Support Package that details the additional investments required to carry out these essential actions

The REAPING mission team (Ethiopia) comprised Kassahun Negash (Acting Team Leader, Malaria & Other Vector Borne Diseases Team, FMOH-Ethiopia), Daddi Jima (Malaria Team, FMOH- Ethiopia) Fatoumata Nafo-Traore (RBM-WHO), James Banda (Team leader-RBM Partnership Secretariat), Kopano Mukelabai (UNICEF-New York); Charles Paluku (WHO-ICP, East Africa, EARN); Monica Olewe (WHO-ICP- East Africa, EARN), Ambachew Medhin (NPO/WHO- Ethiopia) Asknakew Kabede (NPO/WHO- Ethiopia), John Chimumbwa (Net Mark, Johannesburg South Africa); Andrew Collins (Malaria Consortium Uganda, EARN); Melanie Renshaw (UNICEF ESARO, EARN); Christiane Rudert-Thorpe (UNICEF Ethiopia); Chris White (UNICEF-Ethiopia); and Patrick Moonasar

5. METHODOLOGY

Approximately six members of the mission team (see Annex 2b) attended a 2-day pre-REAPING mission meeting, organised by the Federal Ministry of Health (FMOH) in Nazareth, Ethiopia, on the 12 –13 February 2004. The objectives of this meeting were: (i) for the FMOH (Ethiopia) to obtain data for the years 2001-2003 on the key RBM strategies from the Regional Health Bureaus (see Annex 2) and (ii) to obtain regional level consensus around key policy areas, including malaria in pregnancy, drug policy change, ITNs, and emergencies and epidemics. Attendance at this meeting by the pre-REAPING team proved extremely beneficial and provided useful insights on malaria control in Ethiopia.

The methodology employed in the REAPING country consultative meeting included document review (see Annex 3), a one day workshop, interviews with Ministry of Health personnel and partners (see Annex 1), and culminated in a Consensus Meeting (see Annex 2).

Following the Consensus Meeting, the Essential Actions and Country Support Package were discussed with the Department Head for Disease Prevention and Control. Further detailed

¹ The RBM Partnership Secretariat categorised African countries into 3 groups. Category One countries are those considered most ready to rapidly scale up the coverage of interventions. Ethiopia is classed as a Category One country.

discussions will also be carried on within the Malaria Prevention and Control Team and among members of the MCST. Following these discussions, a complete work plan will be prepared by the FMOH and a request for all the technical assistances identified in the support package will be forwarded to the RBM Secretariat, Geneva, through the WHO country office.

6. SUMMARY SITUATION ANALYSIS

6.1. Malaria transmission and burden

Malaria is one of Ethiopia's leading causes of morbidity and mortality. Three quarters of the land mass (altitude < 2000 m) is regarded as malaria affected. About 68% (>46 million people) of the total population (estimated at 63 million) is at risk of acquiring malaria infections.

Malaria transmission

Malaria transmission in Ethiopia is seasonal and largely unstable in nature due to varied topography (the altitude ranges from 100m below sea level to more than 3,000m above) and climatic conditions. The major malaria transmission period follows the June – September rains and occurs between September – December, while the minor transmission season occurs between April – May following the February – March rains. Malaria transmission in Ethiopia is categorized as either: perennial, seasonal or epidemic. Ecological conditions at relatively high altitudes (1500-2500m) do not normally favour malaria transmission. However, every 5-8 years, major epidemics can occur at these altitudes as a result of climatic fluctuations, including increased surface temperature, rainfall anomalies and drought-related effects. Populations living at altitude are particularly vulnerable to severe malaria as they are unable to develop the protective immunity to malaria that comes with regular exposure and they are subject to periodic bouts of drought-related famine.

Malaria Cases

It is estimated that the annual number of malaria cases is approximately 4-5 million, with 70,000 deaths. The infection case fatality rate ranges from 17-35%. Malaria case estimates for persons attending outpatient clinics were approximately 2.6 million in 2001, 2.5 million in 2002 and alarmingly increased to approximately 6.5 million in 2003 (Table 1). Malaria cases for in-patients at hospital level for 2001 was 14,868 increasing to 22,118 in 2002 and further increasing to 37,913 cases in 2003 (table 1). From the above data it is clearly evident that malaria morbidity in Ethiopia is on the increase. Reasons for the increase include: population movements, increased rainfall coupled with localised epidemics, possible parasite drug resistance and lack of effective implementation of malaria prevention and control strategies across the country.

Table 1. Health Facility Based Malaria Morbidity, Admissions and Deaths, 2001 - 2003

Year	Total OPD	Clinical Malaria	% Malaria
2001	8472825	2237579	26.4
2002	8763923	2146771	24.5
2003	9246457	3062391	33.1
Year	Total Admissions	Malaria	% Malaria
2001	193064	15691	8.1
2002	157847	23207	14.7
2003	243807	39550	16.2
Year	Total Deaths	Malaria	% Malaria
2001	14101	1102	7.8
2002	8677	1379	15.9
2003	9865	2885	29.2

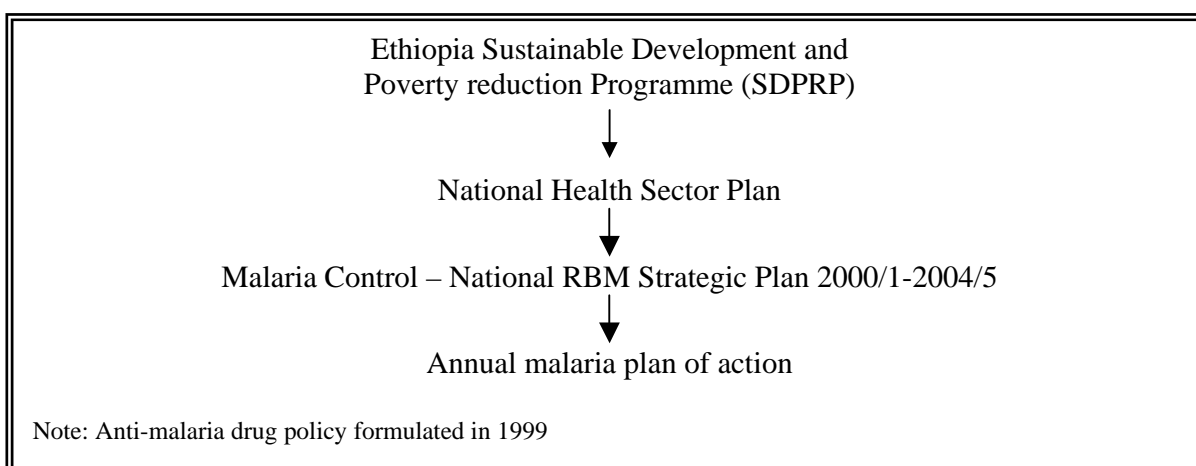
Table 2. Malaria Epidemic Affected Area and Population

Year	Districts Affected	Localities Affected	Cases	Deaths
2001	107	367	117997	55
2002	113	769	601687	389
2003	203	2238	1927310	2619

(NB:)Reported by the RHBs During the Pre-REAPING Workshop, 12 – 13 February 2003. The data does not include report from one region, Gambella, and one Administrative Council, DireDawa (Total population of the two areas is estimated at 600,000). The report was compiled by each region from monthly health facility reports and does not include number of cases and deaths reported from epidemic affected villages.

6.2. Policy and Strategy Environment and Partnerships

Policies and Strategies



Ethiopia has been under going health sector reforms for the past ten years. The health sector follows a set of rolling five-year strategic plans to guide implementation of national health policy. Malaria control is prioritised within the National Health Sector Plan and shared among its eight

principal components². This policy in turn is part of Ethiopia's Sustainable Development and Poverty Reduction Programme (SDPRP).

Implementation of malaria control follows the National RBM Strategic Plan 2000/1- 2004/5. The main objectives of the Ethiopian malaria strategic plan are to reduce the overall burden of malaria by 25% as compared to the baseline level (determined in 2000) and maintain malaria-free areas through strong surveillance and preventative measures.

These will be achieved through the following 4 technical strategic approaches, as advocated by RBM and WHO:

1. Effective case management (early diagnosis and prompt treatment)
2. Selective vector control (IRS and ITNs)
3. Prevention and control of malaria epidemics
4. Prevention and control of malaria in pregnancy

Annual plans of action are prepared from the strategic plan.

The anti malaria drug policy was formulated in 1999 and training of health workers took place in a cascade fashion.

Constraints and Gaps

- The national malaria control strategy is currently not being adequately implemented by the regional and district levels, with the result that regions are planning malaria control activities independent of the national strategy. Human and other resource constraints at regional level are likely to play a significant role in determining the level of implementation of the national malaria control strategy
- There is no written policy document for ITNs and, although a strategic framework has been prepared, it has yet to be endorsed. Although guidelines for vector control interventions exist they contain a lot of technical information, rather than clear practical guidelines for field implementation. There is no policy or strategy on the use of IRS.
- A policy for Malaria in Pregnancy (MIP) has not yet been formulated. Due to the epidemiological patterns in the country and the presence of *Plasmodium vivax*, the FMOH and WHO feel that there is no clear role for IPT.
- The antimalarial drug policy was formulated more than 3 years ago. However, due to increasing parasite resistance to first line treatments (Chloroquine and Sulphadoxine-Pyrimethamine) this policy is now under review. Several issues, including the cost of the proposed artemisinin combination therapy drugs, efficacy and safety in children less than 10 kg in weight, pregnant women and rural community compliance will be considered during the review.

Partnership and Co-ordination Mechanisms

A Central Joint Steering Committee (CJSC) for health, with representatives from government ministries, multilateral and bilateral donors and NGOs, guides implementation of the National Health Sector Plan. The Health, Population and Nutrition (HPN) donor working group coordinates donor efforts within the country in the implementation of Sector Wide Approaches

² The eight components include Health Services Delivery and Quality of Care, Health Facility Rehabilitation and Expansion, Human Resource Development, Pharmaceutical Supply and Management, Information Education and Communication (IEC), Health Sector Management, HMIS, M&E and Operational Research and Health Care Financing.

and meets on a monthly basis. The position of chairperson of the HPN group rotates every three months and the current chair is the Development Co-operation of Ireland and the secretary is WHO.

The main co-ordination mechanism relevant to malaria is the Malaria Control Support Team (MCST). The MCST was established in 1998 and comprises representatives from MoH, academic institutions and research institutions. The RBM Strategic Plan recommends wider participation of sectoral Ministries (Agriculture, Finance, Education, Information, and Water Resources and Development, plus the Meteorological Agency, and the Disaster Prevention and Preparedness office). Meetings should be quarterly or more frequently if the need arises.

The Country Co-ordinating Committee (CCM) was established as a result of requirements for the Global Fund for AIDS, TB and Malaria (GFATM). It has a total of ten members with representatives from various sectoral ministries (including the Director of Disease Prevention and Control), multilateral and bilateral organisations and the NGO sector. The private sector is not represented, as this constituency has been unable to select a representative who is felt able to represent the varying interests of members. WHO has a secretariat position on the CCM and other members include USAID and the Royal Netherlands Embassy. UNICEF is not represented.

The main role of the Federal Ministry of Health is the development of policy, development of guidelines, resource mobilisation and support to regions and capacity development activities. The regions and districts are the implementers of the planned malaria prevention and control activities. Although the responsibility of the Federal and regional and district levels is clearly defined, emphasis is also given to co-ordination of activities between the Federal Malaria Control Unit and those of the Regional Health Bureau and this is achieved through joint meetings.

Constraints and Gaps

- The team noted that many partners were very enthusiastic and willing to support malaria control activities. However MCST meetings were not taking place in spite of co-ordination mechanisms being in place. Regular MCST meetings were re-established during the recent malaria emergencies in the latter part of 2003 during which period weekly meetings were convened.
- While the CCM has constituency representation from most stakeholders, communication between it and the MCST is reported as being weak. Information flow is poor and MCST members have little knowledge of progress in the implementation of the malaria component of the GFATM. The team notes the overlap between members of the MCST and CCM.
- The NGO and private sectors have also complained of being unable to get details on the procedures for accessing GFATM funds. The team was unable to view government guidelines for accessing GFATM funds. These poor communication channels have led to a large degree of frustration among partners.
- The team also recognises a lack of involvement of other relevant sectors in malaria control such as agriculture, education etc, as was proposed in the guidelines for the MCST in the national strategic plan.

- Co-ordination with the Regional Health Bureaus also appears to be weak with the FMOH complaining of poor information flow from the regional to the central levels. Due to human resource constraints, visits by the Federal Malaria Control Team to the Regional teams have been infrequent. This is exacerbated by the fact that the National Malaria control programme is understaffed with only 3 out of the 7 posts filled. In addition, the post of the malaria control programme manager has been vacant for the past five years and is occupied by an acting manager only. The acting manager changed just before the country mission. Co-ordination and information flow from regions and woredas to Federal level is also weak due in part to a lack of human resources.

Health Financing

Financing for the NHSP is provided by the GoE, supported by partners through the SWAp process. Spending on health by the GoE is steadily increasing as a percentage of overall government expenditure with per capita allocations of 12.2% in (2000/2001) and 19.7% in 2001/2002 (HSDP 4th Annual Meeting Report). The only exception to this upward trend was in 2002/3 when spending on health declined in order to respond to a major food emergency. Other financing for the health sector is mobilised from bilateral partners such as USAID and multilateral agencies (WHO, UNICEF, World Bank) in the form of grants and credits

Under SWAp and decentralisation, woredas (districts) are now receiving their own grants to facilitate implementation of their annual plans of action. Regions also have their own revenues from tax collection, which helps to support the health sector.

GFATM

The Global Fund proposal award for malaria is US\$ 38 million over 5 years. Current funds released total US\$ 19 million. The overall aim of the GFATM is to reduce the malaria burden by 25% by the end of 2007. GFATM funds have been earmarked for the following items:

- Increasing demand for and regular use of ITNs in 60% of the high-risk malaria areas by the end of 2007. This will include the procurement and distribution of just over 1.1 million LLINs as well as the training of health workers on ITNs
- Enhancing readiness against malaria epidemics and capacity for anticipating its occurrence early enough to prevent progression through prompt and effective interventions³
- Scaling up the training of community health workers and mother co-ordinators for home management of malaria
- Procurement of antimalarial drugs to support case management
- Provision of improved diagnostic services

Constraints and Gaps:

- Although allocation for health is increasing, at the same time, actual expenditure against planned expenditure remains low. Overall GoE and partner expenditure remains below US\$ 2 per person per year.
- Shortfalls and gaps in funding the National Malaria Control Strategic Plan are estimated at US\$ 15 million. In their presentations on malaria control all regions complained of a lack of resources, especially to cover operational costs.
- A number of partners have concerns about funding flows saying that despite investment of funds, they do not seem to be utilised according to plan, with funds being handed back after the

³ while preparedness plans, training on early epidemic warning and procurement/distribution of logistics for IRS are included in this, operational costs for IRS are not included.

period covered by plans. This is put down to human resource shortages and a weak health system unable to absorb the funds.

- Although the GFATM funds have been received in the country, they have not yet been spent. The FMOH indicated that the arrival of the funds was delayed despite the signing of the agreement in September 2003.

6.3. Access to effective treatment

One of the key strategies for malaria control is to ensure early diagnosis and prompt treatment through: (i) improved access to effective antimalarial drugs, (ii) improved quality of care in public and private health facilities, (iii) strengthened capacity of health facilities, and (iv) community based malaria control activities in order to reduce morbidity and prevent mortality.

Early diagnosis and effective treatment along with correct referral services remains one of the most important components of malaria intervention in Ethiopia.

Key policy issues

The national antimalarial drug policy and guideline was revised in 1998. The national policy recommends presumptive treatment of malaria (at peripheral health facilities, and by CHWs and MCHPs) should be a single dose of SP. If fever persists after 72 hours, a follow-up treatment with chloroquine is recommended. If symptoms persist after an additional 48 hours, a referral is made to the nearest health facility. In health facilities with microscopic diagnostic facilities, patients positive for *P. falciparum* should be given a single dose of SP while those positive for *P. vivax* should be given chloroquine. The patient is referred if any symptoms of severe malaria are observed.

Quinine is recommended for the management of severe malaria and primaquine for anti-relapse treatment and as a gametocytocidal drug to be used during epidemic situations.

A therapeutic efficacy study on SP has been completed in 11/12 sites and the data are being validated prior to review and updating of the national antimalarial drug policy. The artemisinin-based combination therapy Artemether-Lumefantrine (Coartem™) is in the process of being registered while other options will be considered once the resistance study has been analysed and shared with partners during a national workshop (tentatively scheduled for June 2004).

Constraints and Gaps

- Early diagnosis, prompt and adequate treatment is limited by low health service coverage (61%) and low service utilization rates (45%).
- Effective diagnosis and treatment interventions are further complicated by rugged terrain and lack of infrastructure. The proportion of patients treated within 24 hours from onset of fever is limited to less than 5% (DHS, 2000, RBM baseline survey 2001).
- Generally poor quality of diagnosis and treatment services is reflected in the high case fatality rates for malaria (16-35%). Health workers often fail to receive basic malariology instruction, which is further compounded by high attrition rate of trained health workers.
- Shortages of anti-malarial drugs, diagnostic equipment and other supplies are often experienced in health facilities and community health workers constantly cope with uncertainty of replenishment of these critical supplies. Mechanisms for quality assurance and control on microscopic diagnostic procedures in health facilities are weak and supportive supervision of case management in health facilities is often inadequate.

6.4. Selective vector control

The main goal of vector control in Ethiopia is to reduce the level of malaria transmission so that malaria morbidity and mortality is reduced. The main focus is:

- Improved targeting of localities for coverage and quality of indoor residual spraying
- Introduction, expansion and scaling up the use of ITNs
- Application of environmental management and chemical larval control in areas where it could be cost effective

ITNs

Going to scale with ITNs is an integral part of selective vector control in Ethiopia. Historically there has been limited use of ITNs. The 2000 DHS found coverage rates for nets of 1.5% and for ITNs of 0.5%. Since then, approximately 1.3 million ITNs have been introduced in Ethiopia and significant experience has been gained, with nets being sold at subsidised prices through health facilities and community health workers and also distributed during emergencies. As a result of concerns about affordability of ITNs in rural communities, in 2004, funds from GFATM will be used to distribute 1.2 million nets free of charge to pregnant women and children. It has been agreed that free/highly subsidized ITNs should be provided to pregnant women and children under five years in priority economically and geographically vulnerable malarious areas and during emergency situations. Although private sector retailing has been limited, there is potential for urban sales, and PSI have recently launched a social marketing campaign in Southern Region. Although the current level of knowledge concerning ITNs is relatively low, experience has shown that it is relatively easy to create awareness through an effective communication programme.

In 2003 a National ITN Strategic Plan was developed and reviewed jointly by the MOH, WHO, UNICEF and other stakeholders. The Strategic Plan is intended to serve as a framework for ITN interventions in Ethiopia for the next five years, aimed at achieving the Abuja target of access of 60% of pregnant women and children under five years of age.

The Strategic Plan outlines a market segmentation approach to ITN distribution including:

- Free nets in emergencies
- Free and highly subsidized nets targeting pregnant women and children under five
- Market priming through social marketing
- Unassisted commercial marketing

The strategic plan also supports the:

- Creation of an enabling environment including the removal of taxes and tariffs on ITNs and registration of all WHOPES-approved insecticides
- Demand creation through a comprehensive communication strategy.
- Creation of a sustainable supply and distribution System

Constraints and gaps:

- Despite signing the Abuja declaration, taxes and tariffs on ITNs are still in place.
- To date the National ITN Strategic Plan has not been endorsed by the Ministry of Health.

IRS

Indoor residual insecticides are applied on a selective basis, targeting epidemic prone areas. DDT remains the insecticide of choice whilst malathion is used as an alternative. Each year, more than 1 million houses are sprayed in about 5,000 localities protecting about five million people from the risk of malaria. The cost of IRS is fully covered by the government.

Constraints and gaps:

There are some serious constraints to the effective implementation of the IRS programme in Ethiopia.

- On the basis of epidemiological, operational and socioeconomic stratification, approximately 50% of epidemic prone areas should be covered with IRS. However, only about 20-25% of these areas are protected due to resource limitations. Shortages of insecticides, spray pumps, spare parts, vehicles and operational funds limit coverage.
- Lack of a systematic selection and inappropriate targeting of malarious localities for IRS. As disease incidence fluctuates from season to season and from year to year, correct targeting requires adequate epidemiological knowledge and systematic analysis, including mapping and updating of risk areas at village level. However, this is not done largely due to lack of skilled manpower and reduced capacity at lower levels.
- There is also a shortage of spray technicians, mainly due to the high attrition rate among malaria workers and the absence of new trainees to replace them.

6.5. Malaria Epidemics Prevention and Control

Malaria epidemic prevention and control is a key component of the National Five Year Strategic Plan for Malaria Control (2001-2005). In summary, the strategic plan and federal ministry guidelines for epidemic prevention and control have the following as key components:

- Early warning and case detection through epidemiological surveillance and monitoring of environmental precipitating factors such as rainfall and surface temperature anomalies
- Mapping of epidemic-prone areas
- Contingency funding for epidemic response operations
- Epidemic prevention through indoor residual spraying

The last major confirmed epidemic occurred between September and December 2003. The experiences gained during this epidemic suggest that the epidemic strategy and guidelines need to be revisited and important steps added to enable effective implementation.

Constraints and challenges:

The key constraints affecting the response to the last epidemic include:

- Poor, slow and inconsistent surveillance, coverage and reporting systems
- Non operational early warning systems
- Lack of regional and district-level epidemic risk maps, with the criteria for identifying epidemic-prone communities clarified
- No clarity over what constitutes an epidemic and who has the authority to declare malaria emergencies based on epidemiological evidence
- Inadequate contingency funding and poorly defined systems for maintaining contingency stocks of insecticide for IRS and anti-malarial drugs to malaria units at appropriate levels
- Weak epidemic preparedness planning and micro-planning in most regions
- Poorly organised and low finances for IRS operations
- Unclear policies regarding free distribution of drugs and ITN during epidemics
- No customs fast-track systems in place for the rapid clearance of drugs, insecticide and ITNs at ports
- Potential drug resistance to SP

6.6. Malaria Prevention and Control in Pregnancy

The current status

The unstable nature of disease transmission and co-existence of *P.falciparum* and *P.vivax* makes malaria in pregnancy a special scenario. The existence of low protective immunity increases the severity of the disease in multigravidae, unlike highly endemic malaria transmission areas.

The following intervention measures and strategies have been identified to reduce the malaria burden during pregnancy:

- Incorporation of antimalarial services into routine ante-natal (ANC) service,
- Assurance of early diagnosis and effective treatment,
- Promotion on use of ITNs during pregnancy and
- Provision of chemoprophylaxis during epidemics.

Constraints and gaps:

- There is no clear evidence-based specific policy and long-term strategy on prevention and control of malaria in pregnancy.
- Minimum intervention packages are not developed or linked with other intervention programmes like MCH, Making Pregnancy Safer Initiative, IMCI, EPI outreach services.
- The prior provision of chemoprophylaxis in limited situations has been discontinued as a result of the emergence and spread of *P.falciparum* resistance to CQ.
- Intermittent preventive treatment (IPT) is not a promising strategy for most parts of the country. It may have a possible role in stable areas although cost-effectiveness needs to be assessed.
- The coexistence of *P. vivax* malaria with *P. falciparum* makes it difficult to use IPT with SP in pregnancy.
- There is low ANC service coverage and utilisation and use of ITNs is low.

6.7. Supportive Strategies

Human Resource Development

Human resources remain a constraining factor throughout the health sector in Ethiopia and were a cause for concern in discussions with government and partners in relation to malaria control. According to the review of the National Health Sector Plan, the overall trend in resources has been improving throughout the sector. However, recruitment and retention of staff remains a major problem. In the Malaria Control Unit, only 3 out of 8 approved positions are filled.

The FMOH sees the main constraining factor as being a lack of appropriately qualified personnel. It is difficult to attract the appropriate staff without adequate remuneration and topping up of staff salaries is not an option. The GOE also points out the tendency for partners to employ personnel from the government services. The partners in turn question the commitment of the Government to Malaria Control citing the long standing vacancy of the unit manager. This position has remained vacant for the past 5 years and only acting managers have served during this period.

Staff shortages, similar to those experienced by the MOH, are experienced at Regional and Woreda levels in most regions. With decentralisation, many personnel specialised in vector control have retired or transferred to district level. As reported by the regions during the pre-

REAPING workshop, it is estimated that only a small percentage actually took up positions at the district level. It was also reported that currently, approximately 50% of positions at regional level remain unfilled. At Woreda (district) level, some regions have no specific position for malaria prevention and control and the health personnel at this level cover all aspects of disease control.

At community level, a number of Regions (e.g Tigray, SNNPR and Oromia) have tried to address the problem of human resource shortage and poor coverage of the public health system by training community members in malaria control activities. These community based malaria agents have been involved in such activities as diagnosis, delivery of antimalarials, delivery of ITNs and health education.

As a response to the high burden of preventable diseases and low coverage of existing health services, the GOE has embarked on an ambitious programme to train community workers (Health Extension Agents) in all aspects of health prevention as well as limited curative activities. The HEAs, almost exclusively females, are to be chosen by community members within their Kebeles, will be trained for one year in vocational training institutes and then will return to their communities where they will be in charge of health posts. Currently, an initial group of some 3,000 HEAs have been chosen and have commenced training. The training follows approximately 16 modules of which one is dedicated to malaria prevention and control.

Information education and communication

The objectives of the IEC strategy are to:

- Promote political and community support for malaria control,
- Support advocacy and resource mobilization skills for integrated multisectoral malaria control activities,
- Create sustainable behavioural change for malaria prevention,
- Improve community health seeking behaviour, and participation in control activities,
- Develop the capacity for producing appropriate IEC materials at various levels,
- Improve communication skills among service providers and front-line educators and
- Improve skills of mass media personnel in communication and information.

Communication comprises three separate but inter-linked components namely:

1. Advocacy to raise profile of malaria amongst politicians and partners;
2. Information sharing and dissemination amongst partners and
3. Communication designed to influence behaviour of individuals (include mass media, theatre and songs, interpersonal participatory communications etc.).

Constraints and gaps

- There has been limited progress in malaria communication. The majority of activities have been limited to the production of IEC materials such as posters and leaflets.

Operational Research

The National strategic plan outlines a number of research priorities relating to malaria control, including: disease management, vector control (insecticide resistance, cost effectiveness of different interventions, insecticide options, entomological surveys, KAP on ITN use), epidemic prevention and control, and malaria in pregnancy.

A number of institutions are involved in malaria related research as well as operational research including, Ethiopia Nutrition and Health Research Institute (ENHRI), Institute of

Pathobiology, Addis Ababa University, medical and science faculties and the Ethiopian Science and Technology Commission

Studies that are currently ongoing include:

- In-vivo drug efficacy studies on Sulphadoxine Pyrimethamine;
- Safety and efficacy evaluation of Co-artem;
- KAP study on ITNs;
- The status of malaria in pregnancy;
- Malaria Early Warning systems project in East Shoa;
- Temporal and spatial analysis of malaria risk in East Shoa
- Study on economic impact of epidemic malaria.

Health management information systems/ Monitoring and Evaluation

WHO is currently involved in improving monitoring systems through the standardisation of reporting formats and improving compliance with their use. Data are being collected on a quarterly basis from health facilities and districts and biannually for IRS and ITNs.

Constraints and gaps:

- It is generally acknowledged that since decentralisation, the HMIS system has weakened and this affects all levels of the health system. Within the NHSP, many indicators need to be measured at all levels and yet there are no dedicated staff to measure these indicators. There is a tendency for reports to be collated and forwarded with little feedback and little analysis and use at the district or health facility level.
- There is still a problem with the completeness and quality of information. Timeliness for reporting from regional health bureaus remains a problem and there tends to be a 2-month time lag by the time information reaches the Federal Ministry.
- One of the major problems relates to the timely identification and response to malaria epidemics.
- Work has been conducted in SNNPR to strengthen HMIS systems but this has been confined to this region and not scaled up.

6.8. Malaria Control and Health Systems

Procurement and Distribution of commodities

About 80% of the current Global Fund proposal relates to the procurement and distribution of commodities such as anti malarial drugs and ITNs. In order for these products to reach the end users in a timely manner, there needs to be strong procurement and distribution mechanism.

Currently, the Pharmaceutical Administration and Supply Service (PASS) is responsible for procurement. Other organisations such as UNICEF have also been involved in procurement of commodities relating to malaria (e.g. ITNS and antimalarials). UNICEF has been asked to handle the procurement of ITNs for global funds on behalf of the FMOH.

Constraints and gaps:

- While the MoH is confident that the skills exist in PASS to handle international procurement, they feel that human resources remain a huge constraining factor.

- There have been many delays in the signing of a Memorandum of Understanding between the Ministry of Finance and UNICEF to allow ITN procurement to proceed. Concerns are centred on issues of liability. However, on the last day of the mission, this MoU was finally signed to clear the way for procurement of ITNs to go ahead.
- Major delays were experienced in responding to the malaria outbreaks of 2003. These had serious implications for the clearance of antimalarials and ITNs needed for emergency response to malaria outbreaks. The main challenges identified were due to procurement procedures and clearance through customs. During the emergency several customs staff members were changed and forms went missing causing long delays.
- Delays of one month or more persist, especially in clearance procedures of commodities from customs. These are due to a very bureaucratic process involving transfers of money and paperwork between various Ministries and Departments including revenue, finance, health and federal administration. Some of the major obstacles involve tax assessment procedures. During the week of the mission, a meeting between the Federal Government and NGOs as well as the private sector led to the establishment of a working group to identify the bottlenecks and accelerate customs clearance procedures. Partners are optimistic that this development will ultimately lead to a solution to the problem.
- In addition to procurement, problems of drug and commodity management at regional level and below were cited during the mission. Weak commodity management systems have led to antimalarial stock-outs in some districts, while other districts had excess stocks. With a possible change to ACTs, which have shorter shelf lives, these weaknesses may result in drugs expiring, with a resultant waste of resources.

7. ABUJA TARGETS – WILL THEY BE MET?

The Abuja targets are:

- 60% of under-fives and pregnant women sleeping under ITNs by 2005.
- 60% of pregnant women receiving IPT1 and IPT2 by 2005.
- 60% of under-fives with fever receiving effective treatment within 24 hours by 2005.

The Malaria Control Support Team (MCST) discussed the Abuja targets and reached consensus regarding the achievements made to date in Ethiopia. The estimate for each target listed above is based on data available from DHS and takes account of the developments made so far in the expansion of health service coverage. The Abuja target (on reaching 60% of coverage with the most suitable personal and communal preventive measure) includes the use of IRS. Currently, on average 800,000 to 900,000 unit structures are sprayed with insecticides. Therefore, the estimates on the vector control targets are for ITNs and IRS combined. More reliable data is expected from the DHS survey that will be conducted sometime in 2004.

The following are estimates given by the FMOH and the MCST:

- Early diagnosis and treatment= 7%
- Selective vector control (IRS&ITN)= 13.9%
- Detect and contain epidemics two weeks from onset=0%
- IPT coverage = 0%

Due to the lack of empirical data and models that would allow us to make firm estimates, the estimates given below should be interpreted as broad indications.

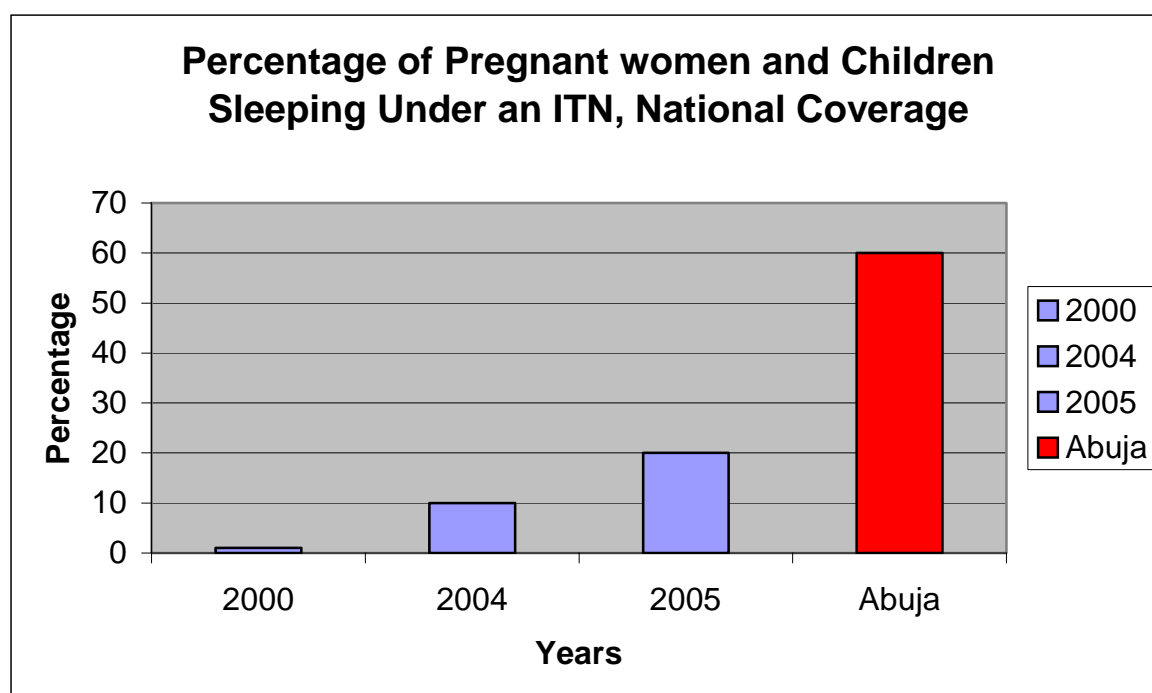
7.1. ITN coverage among under-fives and pregnant women

The Abuja target on preventive measures is “at least 60% of those at risk, especially pregnant women and children under five, should benefit from the most appropriate combinations of personal and communal protection, including ITNs. In the Ethiopian context, this includes application of indoor residual spraying (IRS). IRS annually covers 800,000 – 900,000 structures, equivalent to 320,000 - 360,000 households.

The DHS survey in 2000 revealed a low ITN coverage of between 1-2% for all age groups. Whilst children and pregnant women are top priority groups for the use of ITNs, it should be noted that in areas where the intervention is applicable, all age groups are eligible for ITNs.

If by the end of 2005, 20% of under-fives and pregnant women (as a worst case scenario) are to sleep under an insecticide-treated mosquito net the following should occur:

Year	Assumptions and actions
2000	<ul style="list-style-type: none"> Coverage is between 0.5-1.5%.
2004	<ul style="list-style-type: none"> Ratify ITN strategic plan. Remove taxes and tariffs on ITNs Develop regional guidelines to ratify the plan Develop a programme package approach with other programmes (IMCI+ EPI outreach) to scale up coverage. Coverage increases to 10%.
2005	<ul style="list-style-type: none"> Use market segmentation approach to scale up coverage; Partners and stakeholders Increase social marketing and promote local production of ITNs Use CBO and faith based organisations to scale up delivery Coverage increases to (20%).



NB. An important assumption is that GFATM funds received should be swiftly mobilised to ensure rapid delivery. This can only take place if strong procurement and distribution mechanisms are in place.

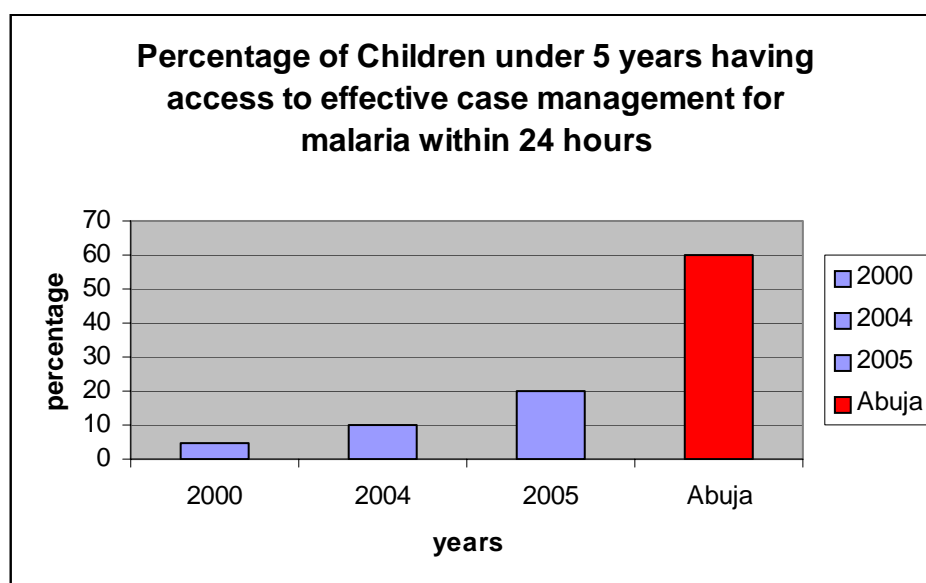
7.2. IPT coverage among pregnant women

IPT has not been adopted as a policy for the prevention of malaria during pregnancy due to the nature of malaria transmission in the country. Moreover, preliminary results from recent studies on the therapeutic efficacy of Sulphadoxine-Pyrimethamine (SP) have shown that there is a high level of treatment failure. In consequence, IPT is not considered to be an appropriate strategy even in the limited areas of intense transmission. During the pre-REAPING workshop, it was recommended to strengthen ANC services, case management and use of ITNs by pregnant women.

7.3. Access to effective treatment for under-fives

If by the end of 2005, 20% of under-fives with fever were to receive effective treatment within 24 hours following should occur:

Year	Assumptions and actions
2000	<ul style="list-style-type: none"> Coverage was estimated based on available data from .DHS survey 5%
2004	<ul style="list-style-type: none"> Update treatment guidelines Consolidate regional community based implementation plans Coverage increases to 10%.
2005	<ul style="list-style-type: none"> Use Health Extension package to improve access to treatment Scale up home and community based treatment. Use programmes such as IMCI and EPI extension packages Coverage increases to 20 %.



NB. An important assumption for this target is that an effective antimalarial drug is selected coupled with the use and strengthening of the Health extension package for effective case management.

7.4. Summary

Ethiopia is undergoing health sector reform. The key challenge for the malaria control programme is to integrate with other programmes, and at the same time maintain focus on implementing its strategic plan. Achieving the Abuja targets (within the set timeframes) is

indeed a challenge. However through a multi-sectoral partnership co-ordinated by the MCST the future for achieving effective malaria control in Ethiopia is encouraging.

8. THE ESSENTIAL ACTIONS

The essential actions given below are those deemed necessary by the RBM Country partnership, EARN and RBM Secretariat to accelerate implementation and reach the coverage rates given in the previous section.

It should be emphasised that these essential actions only include those that are not currently planned and budgeted for within existing resources in the country, including Global Fund monies.

8.1. Strategy Policy and Partnership

Policy and Strategy Environment:

1. In order to achieve effective scaling up of RBM interventions, it is vital that a clear policy and strategy environment exists. In a decentralized health system much of the operational decision making for malaria control lies with the regional and district level authorities. However, operational decisions are informed by federal level policy, which is enforced through appropriate co-ordination and communication channels. The policy and strategy environment needs urgent clarification
2. There needs to be a well functioning co-ordination mechanism between all RBM partners both at the Federal level and also between the Federal and Regional levels.

Leadership:

In order for there to be an enabling environment for malaria prevention and control in Ethiopia, the Federal Level Malaria Control Unit must have strong leadership and the authority to be able to function in direct support of the regional bureaus and other partners engaged in malaria control programming.

1. Leadership issues needs to be urgently addressed, by inclusion of more active partners and improving communication from the CCM to partners. The MCST is not holding regular meetings. This is a cause for concern. Meetings need to be resumed, and key strategic taskforce needs to be established to look at the challenges of ITN implementation; malaria in pregnancy policies, access to effective treatment and malaria epidemics and emergencies.
2. The MCST should formalise their relationship with the HPN, with the view to ensuring that these essential actions and the National Malaria Strategic Plan is fully supported and operationalised.
3. MCST should also meet and negotiate with the regions on a regular basis to ensure that national policies and strategies are fully understood. The MCST should guide operations at this and lower levels. MCST visits to the regions will be most effective when the regions are drawing up their annual plans, as this will ensure that the plans are in line with the FMOH strategic goals.
4. Effective discussion between the MCST and the regions can be best achieved by direct visits to the regions at the time of drawing up regional annual plans of action.

Health Financing

The team recommends the following essential actions:

1. Submit a proposal for round four of the GFATM to supplement the existing approved proposal in order to cover the cost of a change in antimalarial drug policy. This proposal should also include the operational costs for IRS that had not been included in the last proposal.
2. Decide upon indicators for malaria control that can be included in the Sustainable Development and Poverty Reduction Paper (SDPRP).
3. Carry out a comprehensive analysis of malaria financing including a strategy for optimising existing funds to take interventions to scale.

8.2. Access to effective treatment

The team recommends the following essential actions:

1. Update, ratify and disseminate drug policy
2. Hasten the registration of ACT (Coartem, artemether etc)
3. Include ACTs in 4th round GFATM proposal, based on the most expensive ACT
4. Update treatment guidelines for health workers
5. Consolidate regional community based implementation plans
6. Scale up integrated community based malaria interventions
7. Document best practices for scaled up community based malaria prevention and control practices
8. Operational research needs to be conducted on:
 - the role of rapid diagnostic test in context of ACTs
 - compliance of patients to ACTs
 - the economic impact of ACTs on the rural poor populations
9. The Use of Health Extension Package (HEP) is envisioned to improve access to early diagnosis and treatment. To achieve this, home and community based malaria treatment services, through training of mother co-ordinators and health promoters (MCHP) and health extension workers, needs to be scaled up. There is also a need to improve the performance of health workers on diagnosis and treatment of malaria by developing and implementing a training strategy to improve health worker capacity while integrating malaria with other programmes (IMCI, Reproductive health, EPI).

8.3. Selective vector control

ITNs

The team recommends the following essential actions:

1. The market segmentation approach outlined in the ITN strategic plan is appropriate for scale up of ITNs and, following a final review by the MCST, should be ratified.
2. In accordance with the strategic plan, the MCST should form an ITN Steering Committee, with additional membership (e.g. private sector, social marketing agencies, NGOs, RHBs), to co-ordinate implementation of the ITN strategic plan, including the development of regional guidelines on how to operationalise the plan.

3. Detailed, regional level comprehensive implementation plans, with regional decision making authority on targeting and distribution mechanisms should be developed, building on GFATM implementation plans.
4. The major constraint remains the capacity of both the public and private sectors to deliver ITNs to rural populations. A programme package approach, linked to other programmes such as IMCI and EPI outreach, the Health Extension package, ANC services, enhanced outreach and campaigns etc, should be adopted to reduce costs, increase integration and improve coverage in rural areas. As a result of low re-treatment rates, re-treatment of nets should be free until LLINs are taken to scale. WHOPES-approved LLINs, incorporating insecticide already registered in Ethiopia, can be imported.
5. For the removal of taxes and tariffs, a policy brief should be prepared to help in advocacy, in addition to the possibility of a study tour to Tanzania for decision makers. The ITN task force will address issues of taking forward the development of local production, reduction of taxes & tariffs, customs and registration procedures.

IRS

The team recommends the following essential actions:

1. A comprehensive review of the IRS programme should be carried out to gain an overview of current strengths and weaknesses, learn lessons and allow for a reassessment of how to optimize the spray programme in Ethiopia. This should also include a review of financing mechanisms and flow of resources, which has led to some delays in programme implementation.
2. An implementation and financing plan covering timely and effective targeting, training of vector control staff, infrastructure requirements, provision of spraying equipment and other supplies etc will be developed. This will include micro-planning of IRS at regional level and district levels.
3. Adequate resources must be allocated to the IRS programme. IRS costs should be included in the GFATM proposal and efforts should be made to lobby other partners to finance the programme.

8.4. Malaria Epidemics Prevention and Control

To address constraints and improve the preparedness and response capability of the Federal Ministry of Health, the following steps are strongly recommended before the next epidemic season:

1. Drug procurement, distribution and use:
 - a. Register ACTs and Artemether anti-malarial drugs for use during epidemics as a matter of priority (reflect in the policy and guideline documentation) following analysis of the latest efficacy study for SP
 - b. Ensure ACT procurement and use is reflected in the next (4th round) GFATM proposal
 - c. Procure adequate stocks of ACT as soon as possible, advocating for additional funding where required
 - d. Develop guidelines and conduct training of health personnel on the use of ACT for case management

2. Assess the suitability of RDTs to improve diagnostic capacity in areas with low health facility coverage and where epidemic investigation and response teams operate
3. Ensure adequate contingency funding is made available at federal, regional and district level as appropriate
4. Establish a customs clearance fast-track system for emergency malaria supplies (including drugs and ITN)
5. Map and stratify malaria epidemic risk and vulnerable population groups for improved targeting of resources and control interventions
6. Identify suitable and representative sentinel sites for the collation, analysis and utilisation of epidemiological data for epidemic prediction, detection and response (in combination with early warning and long-range forecasting information)
7. Draft regional preparedness and response plans, conduct micro-planning exercises
8. Clarify the question of free ITN and drug provision during epidemics and emergencies (reflect in the amended strategy and guideline documents)
9. Amend and disseminate strategic plans and guidelines at all levels

8.5. Malaria Prevention and Control in Pregnancy

The team recommends the following essential action:

1. Formulate, ratify and disseminate MIP policy and strategy
2. Develop and disseminate guidelines for malaria in pregnancy (in line with Safe Motherhood Initiative)
3. Conduct an operational research on the role of ACTs during pregnancy

8.6. Human Resources

Without adequate human resources with the appropriate skills, all attempts to implement the National Strategic Plan for malaria will remain futile and the Abuja targets will continue to be elusive.

The team recommends the following essential action:

1. The principle of community mobilisation for health in the HEP is very encouraging. While mobilising community members for malaria control, it is important that cost effective interventions (e.g. delivery of antimalarials, ITNs, retreatment of nets etc.) are delivered. Interventions that have never been shown to be effective in controlling malaria, (e.g. clearing bushes, filling in all breeding sites), should be avoided.
2. In order to ensure that the Federal Malaria Control Unit can give strong leadership and co-ordination among the RBM partnership and to the Regional Malaria Control Teams, it is important that the position of manager is filled as soon as possible. It is also important to examine positioning of the unit within the Ministry in relation to the fulfilment of its mandate and suggest appropriate changes. In addition, strategies to fill other positions, such as employing newer graduates and giving on job support and training, supported by the partnership, should be considered.
3. The issue of human resource development at all levels requires further scrutiny. It is advised that a study showing the profile of malaria control at all levels is carried out. This will aim at identifying the key tasks to be performed at each levels in relation to malaria control in order to identify the appropriate human resource and capacity building needs for malaria control. These recommendations will form the basis for a

Human Resource Development strategy for malaria control that can be implemented by the FMOH, Regional Health Bureaus and districts, with the assistance of the partners.

8.7. Information education and communication.

An integrated communication strategy for malaria and IMCI should be developed in line with current best practices, including interpersonal participatory processes.

The key next steps should include:

- The collection of data on perceptions and health-related attitudes to malaria control
- Documentation of existing communication materials and methodologies
- Development of a communication strategy and implementation plan.
- Use of the Health Extension Package. The Health Extension Package is seen as an important vehicle for delivery of IEC to the community level and has scope for the using more non-traditional approaches. It is important that this delivery mechanism is backed up by a clear communication strategy for malaria control

8.8. Operational Research

The team recommends the following essential actions:

In order to reach the Abuja targets, a number of areas of operational research will need to be conducted on:

- Best practices for community based malaria prevention and control documented and adapted for scaling up
- Household practices in relation to ITN use documented and disseminated
- Introduction of LLINs and re-treatment issues
- Role of rapid diagnostic test in context of ACTs
- Compliance with ACTs
- Economic impact of ACTs on the rural poor
- Early warning systems for epidemics

Along with research institutions there are a number of NGOs (who have been involved in community work) whose assistance should be sought to collaborate with other stakeholders in such research.

8.9. Malaria Control and Health Systems

1. Procurement and distribution mechanisms are vital to the scaling up of malaria control interventions. The new initiative to establish dialogue between government and stakeholders to speed up customs clearance of commodities is laudable.
2. In the interim, it is advisable to ensure that emergency commodities to respond to epidemic situations are fast tracked.
3. Commodities can be cleared and tax assessments made based on the correct paperwork instead of direct inspection procedures.
4. Given the longstanding difficulties in procurement, it is recommended that in the short term, procurement is contracted out to organisations that have the required capacity. In the meantime, government systems for procurement may be strengthened.

5. In order to improve commodity distribution mechanisms, it is recommended that a more in depth study of management systems relating to malaria control is made and a strategy drawn up to address identified challenges.

9. PROPOSED COUNTRY SUPPORT PACKAGE: ESSENTIAL ACTIONS AND INVESTMENTS REQUIRED - ETHIOPIA

No.	Essential actions (in addition to ongoing activities)	Products	Human resources	Additional Investment Needed				
				Commodities	Equipment	Cost 2004	Cost 2005	Total Cost
1	Review, update, ratify and disseminate policies and strategies							
1.1	National ITN Strategic Plan	ITN strategic plan ratified and disseminated	MCST	Printing		10,000		10,000
1.2	MIP	MIP policy and strategy formulated, ratified and disseminated	MCST subcommittees and Partners, relevant government programmes and RHB	Meetings cost and printing		10,000 10,000		20,000
		Guidelines for malaria in pregnancy developed and disseminated (in line with Safe Motherhood initiative)	MCST Tech Assist and partners	TA 1 month Printing		10,000 10,000		20,000
1.3	IRS	Policy drafted, ratified and disseminated	TA MCST and partners	TA 3 months		40,000		40,000
			Consensus meetings			10,000		10,000
			MCST	TA 1 month		10,000		10,000

No.	Essential actions (in addition to ongoing activities)	Products	Human resources	Additional Investment Needed				
				Commodities	Equipment	Cost 2004	Cost 2005	Total Cost
1.4	Case management/antimalarial policy	Drug policy updated ratified and disseminated	MCST subcommittees and Partners, relevant government programmes and RHB	Meetings cost and printing		10,000 10,000		20,000
		ACT (Coartem, artemether etc) registered	MCST					No cost
		ACTs included in 4th round global fund proposal based on the most expensive ACT	MCST					No cost
		Updated guidelines developed for health workers	MCST Tech Assist and partners	TA one month Printing		10,000 10,000		20,000
1.5	Epidemic preparedness and response plans	Policy and Guidelines updated (based on lessons learned from 2003 epidemic) printed and disseminated	Comprehensive review, TA MCST and partners	TA 3 months Printing		40,000 10,000		50,000
		Use of ACTs in emergencies once registration is completed	MCST					No cost
1.6	Comprehensive communication strategy	Communication strategy developed on key strategic areas	Comprehensive review, TA MCST and partners	TA 2 months Printing		20,000 10,000		30,000

No.	Essential actions (in addition to ongoing activities)	Products	Human resources	Additional Investment Needed				
				Commodities	Equipment	Cost 2004	Cost 2005	Total Cost
2	Develop fully costed regional malaria implementation plan integrated with other programmes							
2.1	Develop regional ITN implementation plans.	Fully costed regional ITN implementation plans prepared	MCST Technical assistance	Meeting costs TA		15,000		15,000
2.2	Strengthen regional IRS implementation plan	Fully costed regional IRS implementation plan prepared	MCST RHB TA	Meeting costs TA		25 000		25,000
2.3	Consolidate regional community based implementation plans	Fully costed regional community based malaria implementation plan developed in line with Health Extension Package	TA x 3 weeks MCST and partners	TA x 3 weeks		10,000		10,000
2.4	Integrate effective malaria communication into regional implementation plans	malaria communication prioritised and integrated in regional implementation plans.	MCST RHB TA	Placement in the MOH- local staff X 2		50,000	50,000	100,000
2.5	Strengthen regional epidemic preparedness and response plans	Revised epidemic preparedness and response plan in place	MCST RHB TA	TA x 3 months		10,000		10,000
3	Going to Scale with Implementation Plans							
3.2	Using every opportunity to go to scale with ITNs	Variety of ITN distribution mechanisms utilised	To be defined			To be costed		To be costed

No.	Essential actions (in addition to ongoing activities)	Products	Human resources	Additional Investment Needed				
				Commodities	Equipment	Cost 2004	Cost 2005	Total Cost
		Taxes and tariffs removed on all ITNs, insecticides and netting materials	MCST, external TA	TA, Experience exchange				20,000
3.3	Strengthen IRS capacity in epidemic prone districts	IRS coverage in Target districts increased	To be defined			To be costed		To be costed
3.4	Improve access to malaria prevention and treatment.	Integrated community based malaria interventions scaled up	To be defined			To be costed		To be costed
3.5	Strengthen capacity of epidemic prone districts to respond to malaria epidemics	Epidemic prone districts in a state of preparedness				To be costed		To be costed
4	Develop capacity for improved commodity management systems	Analysis of commodity management systems in relation to malaria control in context of wider health sector		TA x 3 weeks		20,000		20,000
		Effectively operating malaria control support systems integrated at appropriate levels				To be costed		To be costed

No.	Essential actions (in addition to ongoing activities)	Products	Human resources	Additional Investment Needed				
				Commodities	Equipment	Cost 2004	Cost 2005	Total Cost
5	Comprehensive analysis of malaria financing in context of the wider health sector	Report on comprehensive malaria financing and flow of funds including a strategy to optimise the available sources of finance locally and globally for taking malaria control interventions to scale	Approx 3 week	Meeting transport and other facilities		12,000		12,000
6	Operational Research	1. Best practices for community based malaria prevention and control documented and adapted for scaling up 2. Household practices in relation to ITN use documented and disseminated 3. Introduction of LLINs and retreatment issues 4. Role of rapid diagnostic test in context of ACTs 5. Compliance with ACTs 6. Role of ACTs in pregnancy 7. Economic impact of ACTs on the rural poor 8. Early warning systems for epidemics	Academic/research institutions			To be costed		To be costed
7	Partnerships - Optimise the operations of the existing partnership co-ordination mechanisms	Country Partnership Advisor	Long term TA (2 years)			To be determined		To be determined

No.	Essential actions (in addition to ongoing activities)	Products	Human resources	Additional Investment Needed				
				Commodities	Equipment	Cost 2004	Cost 2005	Total Cost
8	Profiling of malaria control services at all levels	Report and Strategy for HRD for malaria services within overall health strategy	International and local TA x 4 weeks			50,000		50,000
		Human resource development strategy for malaria implemented				To be costed		To be costed
9	Packaging of all components for taking RBM activities to scale listed above into a business plan in the context of the overall HSSP	Business Plan	International TA			10,000		10,000
10	Evaluation of achievements in malaria control against Abuja targets	Report, recommendations and strategy for 2006-2010	Team of Experts			To be costed		To be costed
11	Harmonise essential actions and current global fund workplan with existing annual workplans	Harmonised malaria control plan	TA/ MCST					500
								502,000

10. FOLLOW UP ACTIONS

- The Malaria Control Support Team (MCST) will meet on 24 February 2004 to discuss the country support package for Ethiopia and work out an implementation strategy.
- The MCST will provide feedback to the RBM mission team leader by 27 February 2004.
- The MCST to work closely with partners at the central level and the regional health bureau malaria focal persons.
- The REAPING report will be finalised by 04 March 2004
- The report will be presented to RBM Board on 29 March 2004
- In 2005 Annual Review Mission in Ethiopia will include the RBM review

11. ANNEX 1: List of persons and organisations consulted

1. WHO ETHIOPIA - ??? (Representative)
2. UNICEF ETHIOPIA - Bjorn Ljungkvis (Representative)
3. UNICEF ETHIOPIA - John Flanagan (Supply Officer)
4. DCI – Aidan Fitzpatrick
5. USAID - DR. Kassahun (Child Survival and Nutrition Specialist)
6. WORLD BANK -
 - a. DR. Gebreselaissie Okubagzhi (Senior Health Specialist)
 - b. Anwar Back Bouab (Lead Operations Officer Human Development)
7. AU - Dr NAFO to provide the name
9. MOH –
 - DR. Kebade (Minister of Health)
 - DR. Girma Acene (Head of Policy and Planning Unit)
10. NETHERLANDS EMBASSY - Klaas Wit (Health Advisor)
11. ITALIAN COOPERATION/ HEALTH SECTOR DEVELOPMENT
12. PROGRAMME
 - a. Augusti Cosulich (Project Manager)
 - b. Dr. Bereke Amare

11.1. Participants at Consensus Meeting 20 February 2004

No	Name	Organisation/ Institution	Responsibility	Email/ add/ tele
1	Arbessan Belay	DDRAC-RHB	DDAC-RHB	251 05 122348
2	Rehana Abdhuraham	RHB	Harani- RHB	05 667733
3	Abonesh Mariam	HaleWHO-Ethiopia		251 05121348
4	Teshome Desta	WHO-Ethiopia	IMCI	9218945
5	Sam Muzuiigi	WHO-Ethiopia	ICP-IMCI	PO.Box 3069 AA
6	Charles Paluku	Who-Uganda	ICP-Mal	P.Box 261578
7	Fekede Bakha	Inst of Parasitology	Researcher	f. bakha@hotmail.com
8	Kassahum Bekele	Makobu Enterprise PLC	General Manager	Makobu@telecom.net.et
9	Abebe Tadege	NMSA		P.O. Box 1090 Tel 615793
10	Tema Abeza	EMCPA		P.O> Box 183225
11	Addizu	EMCPA		P.O> Box 183225
12	Genandw	Anjereb/ Vestergaard		251181163
13	Deneje Thilugeta	Orbit		251 1 61266/182781
14	Aidan Fitzpatrick	DCI		C/O Embassy of Ireland 665050
15	Daddi Jima	FMOH, Malaria Team	Senior expert	daadhij@yahoo.com
16	Bayou Bela	Syngenta Ag	Country Manager	bayon.syngenta@telecom.net.et
17	Belachew Bunanie	P.P.Sch.co	?	Tele 06 41 2302
18	Kopano Mukelabaai	Unicef- New York		3 UM Plaza; New York N4 10017
19	Christiane Rudert	UNICEF- Ethiopia	Project officer	crudert@unicef.org

20	Oliver Guintzan	WHO-Ethiopia	Epidemiologist	guntianjo@whoet.org
21	Thomas Reuter	Maltese???		malteser@telecom.net.et
22	Daniel Crapper	PSI	Country Director	09 4080 72
23	Wim Fransen	Merlin		merlin-1@telecom.net.et
24	Anglade fehnilve	MSF-f		msfch@telecom.net.et
25	Phillip Humpkins	MSF-f		msfch@telecom.net.et
26	Edward Livewa	MSF- Ch Switzerland		msfch@telecom.net.et
27	augustocosulich	Italian cooperation	HSDP	it2cohmdp@telecom.net.et
28	Eugene Mahlehla	WHO:HAC Geneva		eugenem@whoet.org
29	Hinika Bedaso	ministry of revenue		01281 667466
30	Ajeme Wogi	orimia Health bureau		01 514076
31	Ashenafu Taue	anti malaria Ass		ama@telecom.net.et
32	Kassahun Bekele	USAID		kbelay@usaid.gov
33	yemane Teklai	ESTC		yemanatcklm@hotmail.com
34	Bbere Mikuetie	ama		ama@telecom.net.et
35	Alemayehu Getuchew	moh		malaria@telecom.net.et
36	Wakgali Delessa	Aau-MF		deressa_w@yahoo.com
37	Chris White	Unicef	Project officer	cwhite@unicef.org
38	Melanie Renshaw	Unicef-ESARO	Malaria technical advisor	mrenshaw@unicef.org
39	Andrew Collins	Malaria Consortium	Health systems Advisor	collinsa@who.imul.org
40	Patrick Moonasar	Reaping RBM	consultant	dmoonasar@iafrica.com
41	Kidane Ghibrekilian	WHO-Ethiopia		kidraneg@whoet.org

11.2. Participants Tuesday 16 February 2004 meeting

No	Name	Organisation/ Institution	Responsibility	email/ Address
1	Ambachew Medhin	WHO-Ethiopia	NPO	Ambachew@whoet.org
2	Fekede Bakha	Inst of Parasitology	Researcher	f. bakha@hotmail.com
3	Jena Abez	EMCPA	PR	tenabez@telecom.net.et
4	Beret Amare	Stalion Corperatoin	Project M&E	etachosdp@telecom.net.et
5	Asefon Getacheaw	Tegrey Health Bureau	RHB - DOH	asefaw2000@yahoo.co.uk
6	Phillip Humpkins	MSF-Swiss	Ass. Med. Co-ordinator	msfch@telecom.net.et
7	Christa Hook	M.S.F- Swiss	malaria working group	christa.hook@amsterdam.msf.org
8	Asnakew Kebede	WHO-Ethiopia	NPO	asnakew@whoet.org
9	Patrick Moonasar	Reaping team	consultant	dmoonasar@iafrica.com
10	Alemayehu Getuchew	FMOH	Expert	P.O. Box 1526 ?Facuicher
11	Wakgali peressa	Aau-MF	Public Health instructor	Po.Box 1234 AA
12	Tadesse Alemu	Merlin	PH-Advisor	P.O Box X5697, AA
13	Sam Muzuiigi	WHO-Ethiopia	ICP-IMCI	PO.Box 3069 AA
14	Charles Paluku	Who-Uganda	ICP-Mal	P.Box 261578
15	Monica Oldwele	Who-Uganda	ICP-Mal	P.Box 261578, Kampala Uganda
16	Henika Bedasa	adamarituku	P.PSh.C.O.	P.O. Box 2553
17	Jean Oliver Gwintrin	WHO-Ethiopia	Epidemiologist	quintranjanjo@who.et.org
18	Daddi Jima	FMOH, Malaria Team	Senior expert	daadhij@yahoo.com
19	Kassahum Bekele	Makobu Enterprise PLC	General Manager	Makobu@telecom.net.et
20	Bayou Bela	Syngenta Ag	Country Manager	bayon.syngenta@telecom.net.et
21	Fatou Nafo-Traore	RBM/ WHO Geneva	Director	nafof@who.int
22	Chris White	UNICEF- Ethiopia	Malaria Programme officer	P.O. Box 1169, AA
23	Melanie Renshaw	UNICEF- ESARO	Malaria Advisor	mrenshaw@unicef.org
24	Daniel Argaw	WHO-Ethiopia	DPC	tel 4454`3

25Abeje Zegeye	Beninshangule G HB	Head of Health Bureau	251 7750062/09629315
26Abere Mietiee	anti malaria Ass	Director	257-2270865/09401295
27Thomas Reuter	MaltesER	Country Rep	613079
28Ashengfy Taye	anti malaria Ass	project officer	tele 270865/ email:
29Yosepl Kassaye	min of Foreign Aff	3rd sector	ama@telecom.net
30Anglade jean-we	MSF-F	country representative	tel 155129
31Desmond Chevassse	PSI	Director Malaria control	chavasse@psikenya.org
32Daniel Crapper	PSI	PSI country Director	tel 09 40 80 72
33John Chumumba	Netmark	Snr Programme Manager	jchumumba@aed.org
34Christiane Rudert	Unicef	Project officer Health	crudert@unicef.org
35James Banda	RBM Secretariat	Team Leader	41227912847, Geneva

12. ANNEX 2: Reaping Meeting Programme 16-20 February 2004

Date	Time	Activities/Tasks	Responsible officer(s)
Sunday 15 Feb. 2004	4:00 – 6:00	Arrival & Pre-mission meeting <ul style="list-style-type: none"> Meeting with the team and local organisers to finalise mission agenda Adoption of the methodology finalisation of administrative issues 	Dr. Fatoumata Nafo-Traore, Mission team leader
16 Feb. 04	10:00 – 11:00	Courtesy call to national authorities <ul style="list-style-type: none"> Presentation of mission objectives to H.E the Minister, & DPCD, FMOH 	Dr. Fatoumata Nafo-Traore, Mission team leader
		Briefing of major local heads of partners agencies <ul style="list-style-type: none"> Presentation of mission objectives to heads of local partner agencies and discuss role of partners in the malaria control program 	Local Organizers (FMOH, WHO & UNICEF)
	11:30 – 12:30	WHO	
	12:30 – 2:00	Lunch Break	
	2:30 – 3:30	UNICEF	
	4:00 – 5:00	USAID	
One Day Workshop on the Mission with Regional Health Bureau Heads and Partners – Sheraton Addis			
17 Feb. 04	9:30 – 9:45	<ul style="list-style-type: none"> Welcome & opening remarks 	Dr. Daddi, FMOH
	9:45 – 10:00	<ul style="list-style-type: none"> Presentation of workshop objectives 	Dr. Fatoumata Nafo-Traore, Mission team leader
	10:00 – 10:30	Tea Break	
	10:30 – 11:30	<ul style="list-style-type: none"> Review on progress on implementation of the national strategic Plan (2001 -2003) including SWOT analysis 	Mr. Ambachew, NPO/WHO
	11:30 - 12:30	<ul style="list-style-type: none"> Priority actions & country needs for implementation of actions towards the Abuja targets 	Mr. Asnakew, NPO/WHO
	12:30 - 2:00	<ul style="list-style-type: none"> Lunch Break 	
	2:00 – 4:00	<ul style="list-style-type: none"> Group Discussion 	Groups
	4:00 – 4:30	<ul style="list-style-type: none"> Tea Break 	
	4:30 – 6:00	<ul style="list-style-type: none"> Feed back, discussion & Recommendations 	Dr. James Banda
18 Feb. 04		<ul style="list-style-type: none"> Meeting with other major local heads of partners agencies 	
	9:00 – 10:00	World Bank	Local Organizers (FMOH, WHO & UNICEF)
	10:30 – 11:30	Development Cooperation Ireland	
	12:00 – 12:30	Africa Union	
	12:30 – 2:00	Lunch Break	
	2:00 – 3:00	Royal Netherlands Embassy	
	3:30 – 4:30	Italian Cooperation	
19 Feb. 04	9:00 – 12:00	<ul style="list-style-type: none"> Finalizing recommendations 	
	3:00 – 5:00	<ul style="list-style-type: none"> Debriefing to H.E the Minister, FMOH 	Dr. Fatoumata Nafo-Traore, Mission team leader
20 Feb. 04	9:00 – 12:30 (Sheraton Hotel)	Full RBM Country partnership meeting <ul style="list-style-type: none"> National adoption of findings and recommendations of workshop and identification of partners bridging identified gaps. 	NMCP Manager and Mission Team leader

12.1. Annex 2b: Agenda Pre-Reaping meeting, Nazareth

National Workshop on Roll Back Malaria Progress and Steps Forward 12 – 13 February 2004, Bekele Molla Hotel Nazareth, Ethiopia

Date	Time	Topic	Presenter	Moderator	
12 February 04	8:00 – 8:30	Registration		Dr. Kassahun	
	8:30 – 8:45	Welcoming & Opening Remarks	Dr. Alemayehu Seifu		
	8:45 – 9:00	Objectives of the Workshop	Mr. Ambachew		
	9:00 – 9:30	Organization of Malaria Control in Ethiopia Progress, prospect Challenges & Constraints	Mr. Asnakew Kebede		
	9:30 – 10:00	Self Introduction of Participants			
	10:00 – 10:30	Tea Break			
			Regional Presentations on RBM progress, achievements, plans, needs and gaps		Dr. Agonafir, CRDA
	10:30 – 11:00	Tigray			
	11:00 – 11:30	Amhara			
	11:30 – 12:00	Afar			
	12:00 – 12:30	Oromia			
	12:30 – 2:00	Lunch Break			
	2:00 – 2:30	SNNPR		Dr. Seid, DCI	
	2:30 – 3:00	Gambella			
	3:00 – 3:30	Benshangule-Gumuz			
	3:30 – 4:00	Somali			
	4:00 – 4:30	Tea Break			
	4:30 – 5:00	Harari			
5:00 – 5:30	Dire Dawa		Dr. Daniel, WHO		
5:300 - 7:00	Discussion on RHB Reports				
13 February 04		Presentation on policy issues (30 minutes each)		Dr. Daniel, WHO	
	8:00 – 8:30	ITNs	Ms. Christian		
	8:30 - 9:00	Drug Policy	Mr. Ambachew		
	9:00 - 9:30	Prevention and control of malaria during pregnancy	Mr. Asnakew		
	9:30 - 10:00	Emergency preparedness & response	Mr. Chris		
	10:00 - 10:30	Tea Break		Dr. Melanie	
	10:30 - 12:30	Group Discussion on policy issues	Participants		
	12:30 – 2:00	Lunch Break			
	2:00 – 3:00	Presentation of group reports	Reporters		
	3:00 – 4:00	Presentation of draft national report	Reporters		
	4:00 – 4:30	Tea Break			
4:30 – 6:00	Discussion on the report & closing	Participants			

13. ANNEX 3: Documents reviewed during country consultative mission

1. RBM Malaria Strategic Plan (2001-2005)
2. Health Sector Development Programme Document
3. Ethiopia RBM REAPING desk review document
4. Guidelines for vector control in Ethiopia
5. Guidelines for case management in Ethiopia